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Synthesis, polarity, and structure of 2-chloro-N-[2-(methylsulfanyl)phenyl]- and 2-(diphenylthiophosphoryl)-N--2-(methylsulfanyl)phenyl]acetamides

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Abstract

© 2015 Pleiades Publishing, Ltd. Conformations of 2-chloro-N-[2-(methylsulfanyl)phenyl]- and 2-(diphenylthiophosphoryl)-N-[2-(methylsulfanyl)phenyl]acetamides have been studied by the dipole moment method and quantum chemical calculations. 2-(Diphenylthiophosphoryl)-N-[2-(methylsulfanyl)phenyl]acetamide has been found to exist as an equilibrium mixture of two conformers with synclinal and anticlinal orientations of the {C-{s{p^3}}} - {C-{s{p^2}}} and P=S bonds. 2-Chloro-N-[2-(methylsulfanyl)phenyl]acetamide is represented by one preferred conformer.

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